

February 27, 2019

Department of Environmental Quality

Presentation to the House Agriculture Committee



DEQ and Agriculture Programs: Division of Water Resources



- Overview of support for agricultural programs
 - One Water Concepts
 - US Dept of Agriculture Natural Resources Conservation Services (USDA NRCS)
- Water quantity and water quality planning
- Draft General Permits for Animal Operations

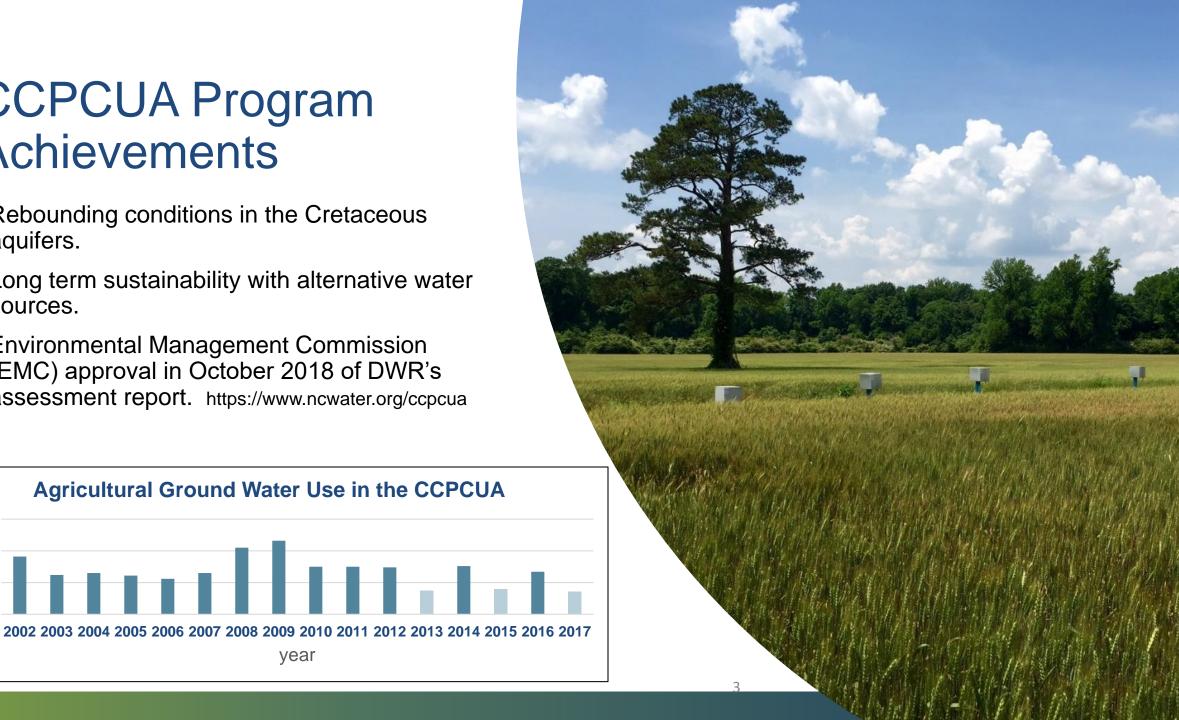


CCPCUA Program Achievements

- Rebounding conditions in the Cretaceous aquifers.
- Long term sustainability with alternative water sources.
- Environmental Management Commission (EMC) approval in October 2018 of DWR's assessment report. https://www.ncwater.org/ccpcua

year

total use



Basin Planning Branch

Understanding Water Resources on a Watershed Scale

- Basin planners work with NCDA&CS Division of Soil and Water Conservation (DSWC) to update information in the basin plans on a county-by-county basis
 - Cost share programs
 - Land use changes
 - Changes in crop and animal numbers
 - o On-the-ground, local feedback on nonpoint source issues impacting water quality
- Basin plans include recommendations to support and fund cost share programs and identify areas in which more research is needed to understand water quality issues

Photo: Watauga River Partners (examples of agricultural BMPs installed in the Beaverdam Creek watershed)

https://deq.nc.gov/about/divisions/water-resources/planning/basin-planning





Animal Feeding Operations Program Overview

- Regulatory Timeline
- G.S. §143-215.10B define Animal Feeding Operations (AFO)
- Permitting Overview
- State General Permits Overview
- Renewal Process
- Key Changes in current drafts





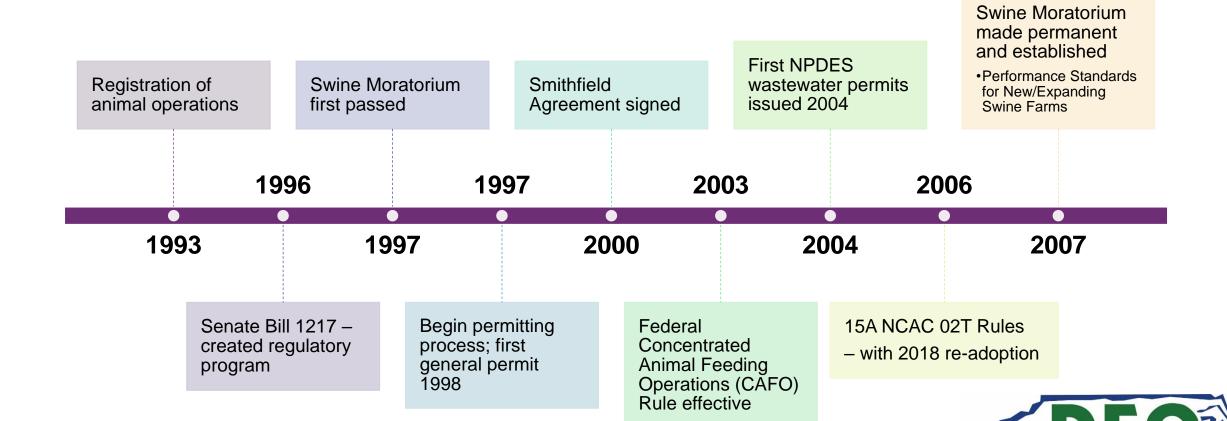
Basic Permit Requirements

Generally Apply to both State and NPDES permits

- Certified Animal Waste Management Plan
 - Farm specific management practices
 - Crops, Soils, Application Windows
 - Setbacks, Application Rate, Nutrient Limits (Agronomic Rate)
- Weather Related Conditions
- Setbacks
 - Surface waters
 - Residential property boundaries
 - Dwellings, etc.
- Notification
- Record Keeping



Regulatory Timeline



See Regulatory Summary handout for details

G.S. §143-215.10B

Definition of Animal Feeding Operation

- Feedlots involving:
 - 250 or more swine
 - 100 or more confined cattle
 - 75 or more horses
 - 30,000 or more poultry with a liquid waste system

Not Regulated ("Deemed Facilities")

- Pastures
- Facilities below feedlot thresholds
- Other animal operation types
 - Dry litter poultry, goats, sheep, etc.
- No permit required
 - Permitted by regulation 15A NCAC 02T .1303





Statutory & Regulatory Authority

Applies to both State and NPDES permits

- G.S. §143-215.10C Applications and Permits
- 15A NCAC 02T Section .1300 Animal Waste Management Systems
 - Non-Discharge permit allows for the application of wastes to the land surface
 - No discharge to surface waters





Permit Types

- State Permits 2,277 total
- Federal Clean Water Act Permits 17 total
 - National Pollutant Discharge Elimination System (NPDES)
- General Permits
 - Classes of facilities of similar design and purpose
 - G.S. §143-215.10C "It is the intent of the General Assembly that most animal waste management systems be permitted under a general permit."
- Individual Permits
 - Facilities with unique treatment systems
 - Unique permit requirements



Permitting Current Number of Permits

- State Permits 2,277 total
 - Swine General Permits 2019
 - Cattle General Permits 151
 - Wet Poultry General Permits 7
 - Individual Permits 100
- Federal Clean Water Act Permits 17 total
 - Swine General Permits 12
 - Cattle General Permits 4
 - Wet Poultry General Permits 1
 - Individual Permits 0



State General Permits Overview

General Permits for Animal Waste Management Systems are renewed every 5 years

- Swine Animal Feeding Operations
- Cattle Animal Feeding Operations
- Poultry Animal Feeding Operations with liquid waste management systems
- Current Permit
 - Signed March 7, 2014
 - Effective October 1, 2014
 - Expires September 30, 2019
 - Must apply for renewal by April 3, 2019



Permit Renewal Timeline

General Permits are in the Public Comment period per 15A NCAC 02 T.0111 and Public Hearings conducted in accordance with G.S. 143 -215.4(b)(1) and (2)

- Summer 2018 Develop draft permits
- October 4, 2018 Stakeholder Meeting postponed due to Hurricane Florence
- Nov 27, 2018 Stakeholder Meeting in Clinton, NC
- Jan 30 March 4, 2019 Public Comment Period
 - Feb 19 Kenansville Public Hearing
 - Feb 26 Statesville Public Hearing



General Permit Structure

- Section I Performance Standards
- Section II Operation & Maintenance Requirements
- Section III Monitoring & Reporting Requirements
- Section IV Inspection & Entry
- Section V General Conditions
- Section VI Penalties
- Section VII Definitions



Types of Proposed Changes

Required changes

- Reflect updates to Statute or Administrative Code
 - 2018 Re-adoption of 15A NCAC 02T

Formatting changes

- Includes Statute and/or Administrative Code Reference
- Updates name of Department, Division Director, dates
- Removes redundant conditions

Technical changes

Ensures adherence to Statute and Administrative Code Requirements



Condition I.9 – Phosphorus Loss Assessment

Proposed Condition:

Phosphorus loss assessment required if soil test P-index of 275 - 400 or higher

- Not a blanket requirement
- Intended to only evaluate sites with highest risk
- NCSU / NCDA&CS / DEQ / NRCS NC developed Phosphorus Loss Assessment Tool (PLAT)
 - Evaluates risk of phosphorus loss from fields to waters
 - Sets application recommendations based upon risk rating
 - Low Nitrogen based rate
 - Medium Nitrogen based rate
 - High Phosphorus based rate
 - Very High No additional phosphorus application allowed



Condition I.9 – Phosphorus Loss Assessment

- G.S. §143-215.10C(e)(6) requires Nitrogen to be a rate limiting nutrient
- Permittees are already required to apply at no greater than agronomic rate
- 15A NCAC 02T .0103 definition of "Agronomic Rate":
 - Specifies nitrogen as a rate limiting nutrient
 - Does not allow overloading of soil with other nutrients or constituents
- PLAT based rates are designed to prevent overloading of Phosphorus in soil, surface water and groundwater



Conditions III.11-14 – Groundwater Monitoring

Proposed Condition:

Requires groundwater monitoring for facilities within the 100-year floodplain.

- Focus on facilities impacted by flooding during storm events.
- Recognizes cost of addition monitoring by selecting small subset of facilities distributed across the state.
- Allows DEQ to evaluate potential GW impacts in at risk locations



Condition III.18 – Annual Report

Proposed Condition:

Require submission of annual report

See handout Attachment A – Draft Annual Report

- Provides summary data, not all records
- Transparency
- Provides data useful for program management and modeling



Submittal of Public Comments



Comment period closes: March 4, 2019

Email:

swinepermit.comments@ncdenr.gov
cattlepermit.comments@ncdenr.gov
wetpoultrypermit.comments@ncdenr.gov

Mail:

Animal Feeding Operations 1636 Mail Service Center Raleigh NC, 27699-1636



Questions?

Linda Culpepper, Director Division of Water Resources

linda.culpepper@ncdenr.gov



